December 13, 2013

To: Executive Board

Subject: **Contract Award – Comprehensive Operational Analysis**

Recommendation

Authorize the Executive Director to negotiate final terms and conditions and enter into a Contract with Nelson\Nygaard in the amount of Eight Hundred Fifty Thousand Six Hundred Eighteen Dollars ($850,618.00) for the Comprehensive Operational Analysis.

Background

At the April 24, 2013 Executive Board meeting, the Board was given a presentation highlighting aspects of the Request for Proposals for the Comprehensive Operational Analysis (COA). The COA is an in-depth review of the services a transit agency provides to determine the system's strengths and weaknesses. Generally, COAs achieve this by determining the effectiveness of current service at meeting peoples' needs and how efficient transit agencies are in delivering those services. Because of their comprehensive nature, COAs are typically completed once every five to ten years. Foothill Transit's last COA was completed in 2005.

The Request for Proposal (RFP) was issued on July 30, 2013, and proposals were received on September 26, 2013 from the following firms: Nelson\Nygaard Consulting Associates Inc. (Nelson\Nygaard), AECOM, Transit Management & Design, Inc. (TMD), Steer Davies Gleave, and CH2M Hill. Each proposal was scored by an evaluation committee based on the following criteria and weighting:

Item	Weighting
Work Plan and Technical Approach	40
Statement of Qualification, Experience and Organizational Relationships	25
Project Understanding	15
Price	20
Total	**100**

Five interviews were conducted, allowing each proposer to clarify and expand on their written proposal and respond to questions from the evaluation team. After the evaluation committee reviewed and scored the proposers based on the interviews, Nelson\Nygaard was ranked highest with an overall score of 92.9 out of a possible 100 points. CH2MHill was ranked second with a score of 92.6 out of a possible 100 points.

A summary of the final scores is provided below.

		Proposer				
Evaluation Factors	**Maximum Score**	**Nelson\Nygaard**	**CH2M Hill**	**TMD**	**AECOM**	**STEER DAVIES GLEAVE**
Work Plan and Technical Approach	40	37.80	36.20	36.00	33.30	33.20
Statement of Qualifications, Experience and Organizational Relationships	25	23.38	22.56	22.38	20.63	19.63
Project Understanding	15	13.69	13.88	13.28	13.31	11.81
Price Score	*20*	*18.05*	*20.00*	*18.20*	*18.09*	*18.36*
Overall Score	***100***	***92.92***	***92.64***	***89.86***	***85.33***	***83.00***

Nelson\Nygaard has extensive experience in COA projects some of the highlights include a COA for Capital Metro in Austin, Texas where the first phase of recommended changes in their COA resulted in a ridership increase of more than one million annual riders. Another COA for Kansas City Area Transportation Authority increased ridership by three percent even though operating costs were reduced by two percent before all recommended changes were implemented. Nelson\Nygaard also performed the CityBus Line by Line Analysis for Culver City, and has done COAs for transit agencies in Rhode Island (RIPTA), Southwest Ohio (SORTA), New Orleans, and Miami-Dade County in Florida.

A summary of project deliverables and a project timeline are included below:

Task 1: Develop Work Plan and Schedule
The Foothill Transit project team will meet with Nelson\Nygaard's project team to develop a project plan including dates for monthly meetings and deliverables.

Deliverables

- ✓ Work plan
- ✓ Organization chart and responsibilities

Task 2: Service Area Profile
The purpose of this phase is to create a detailed picture of the service area, to understand what is in the service area, the people who live here, and types of businesses that operate here. This section will identify corridors with high residential and employment densities, transit-oriented or mixed-use developments, and other corridors with multiple destinations and high trip generators – ingredients which lead to

successful transit systems. Regional traffic and land-use models will be used to identify trip markets that are or are not being served by the Foothill Transit network. These computer models take into account existing infrastructure (e.g., size of road network, availability of utilities, home inventory) in concert with programmed transportation projects (such as the expansion of Metro Rail or implementation of High Occupancy Toll lanes on the freeway) to determine where people are going and how they are getting there.

In addition, the number of intra-town, inter-town, and cross valley trips will be classified and the number of riders on each of these types of services tabulated as a percentage of the system, with trips being categorized on a weekday and weekend basis. This basic building block is an intensive data collection phase which will allow the agency to fully understand what the service area is comprised of and consequently the type of bus service the area is capable of supporting.

Deliverables

- ✓ ArcGIS shapefiles that contain:
  - o Residential and employment densities for the entire service area by parcel.
  - o Foothill Transit, Metro, Omnitrans, and municipally operated bus lines within the Foothill Transit service area.
  - o Metrolink lines and stations within Foothill Transit service area.
  - o All bus stops, classified by line.
- ✓ Map displaying service area with high density corridors highlighted and all operating transit lines. Map can be further segregated by member city if the Consultant prefers.
- ✓ "Line-type share" chart and complementary narrative.

Task 3: Assessment of Current Foothill Transit Ridership

This phase is concerned with understanding who Foothill Transit's riders are and why people do or don't take transit. The purpose of these surveys is to better understand travel behaviors and ascertain means of attracting new riders and growing ridership in the system. Questions will be disseminated to riders aboard the bus and survey materials will be available in the major languages spoken in the service area (English, Chinese, Spanish, etc.). Non-riders will also be included via telephone surveying, with a large enough sample size collected to ensure that the responses are statistically valid and representative of the service area population.

Focus groups representing sub-regions within the service area will also be held to further parse out information uncovered during the on-board and telephone surveys. Focus groups will consist of major employers, non-profit and civic groups, and institutes of higher education, etc. The answers to these surveys will help identify the different

market segments in the service area so that Foothill Transit can provide a distinct, tailored, and relevant service to the plethora of customer segments in our service area. Data collected during this phase of the project will also be used for Foothill Transit's Title VI analysis whenever route or fare changes are to be implemented.

Deliverables

- ✓ Outreach and survey plan presented to Foothill Transit before survey commencement.
- ✓ Data methodology plan and software capable of calculating regression analysis, time-series analysis, coding of qualitative data, crosstabs, means, rankings or GIS mapping analysis.
- ✓ Survey results in chart format with an overview of descriptive statistics, submitted immediately to Foothill Transit once all surveys have been conducted and results tabulated.
- ✓ Analytical report of survey data on a more comprehensive scale in a format the Consultant deems appropriate.
- ✓ GIS maps and shapefiles of "minority lines" within the Foothill Transit service area.

Task 4: System Analysis

A thorough analysis is conducted which ties the results of the preceding sections together. Among other items, a review of industry-wide statistics and a comparison of targets from similar agencies whose service profile mimics Foothill Transit will be completed. The relevancy and attainability of Foothill Transit's Key Performance Indicators will be assessed to ensure that Foothill Transit is employing the industry's best-practice performance measurements.

The COA will also conduct an analysis for every single bus line, with trip frequencies and schedule adherence issues explored to determine the cause of successful and underperforming lines. Ridership on other agency lines which run parallel to Foothill Transit lines will be assessed to determine the competitiveness of Foothill Transit lines and whether there is any duplication in service that can be streamlined or any gaps in service that Foothill Transit can fulfill. Furthermore, the coordination of transfer times with other transit services will be reviewed to ensure that Foothill Transit is not operating in a vacuum and its passengers are experiencing a seamless trip across all travel modes and services.

TransCenters, Park & Ride lots, and corollary facilities also play a crucial role in the bus trip segment, and analyses will determine if these facilities are being strategically utilized and located and best practice site designs. While these destinations are often reached via automobile, the COA will evaluate pedestrian access to bus stops and identify barriers en route, as well as first and last mile gaps in transit service to

destinations. If people cannot access bus stops then this means there are no people who are boarding the bus, so discovering the pedestrian route is equally as important as optimizing bus routes.

Deliverables in Final Report

- ✓ KPI analysis and recommendations
- ✓ Organizational analysis and recommendations
- ✓ Transfers, TransCenters, Park & Ride lots - analyses, statistical indicators, and best practice guides
- ✓ Schedule coordination with other service providers
- ✓ Schedule adherence analysis and recommendations
- ✓ Transit accessibility analysis and GIS map
- ✓ School affiliated transit services analysis

Task 5: Preferred Service Plan and Recommendations

A baseline projection of future ridership will be calculated with service hours, routing of bus lines, population aging, and economic and highway traffic forecasts held constant. Using the findings from the public surveys and the results of the system analysis, multiple scenarios will be created to identify the best methods of maximizing resources and delivering an improved, quality service. Among these methods are alternative network designs for increasing ridership via geographic or productivity means. As an extreme, hypothetical example this would pose the option of whether bus service will consist of a warren of multiple routes with widespread coverage where every street in the service area is penetrated, but only once every 24 hours; or a single line with limited coverage but high frequency (e.g. ten times an hour, 24 hours a day). A variety of scenarios will be developed to effectively address improving transit service and increasing transit patronage. While multiple options will be developed, each scenario will contain an idealized transit network along with a fiscally constrained option segmented into a short term, two-year implementation plan; medium term, five-year implementation plan; and long range 10-year plan. Moreover, the COA will identify grant and funding opportunities from government and other philanthropic resources that could help realize the unconstrained version of plans.

Deliverables in Final Report

- ✓ Travel patterns and ridership projections
- ✓ Line-by-line service improvement recommendations
- ✓ System map for three different transit network models, each to include fiscally constrained and unconstrained versions of the phased service plans under different coverage/productivity schemes.
- ✓ Grant opportunities and deadlines

Timeline

Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Task 1. Work Plan and Schedule															
Task 2. Service Area Profile															
Task 3b. Current Foothill Ridership - Surveys, focus groups, descriptive statistics, and comprehensive analysis of survey data															
Tasks 4 and 5. Monthly progress reports. Deliverables expected at end of contract.															

Budget Impact

The total cost of the COA is $850,618.00. The approved Fiscal Year 2014 Business Plan includes funding for the COA project.

Sincerely,

FOR Joseph Raquel
Director of Planning

Doran J. Barnes
Executive Director